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QUALITY OF CARE AND OUTCOMES ASSESSMENT

RELATIONSHIP BETWEEN BLEEDING AND MORTALITY IN PATIENTS ON DUAL ANTIPLATELET THERAPY VS ASPIRIN ALONE: RESULTS FROM THE CHARISMA TRIAL

ACC Poster Contributions

Ernest N. Morial Convention Center, Hall F

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Background: Little is known about the association between bleeding and death, and in particular, the actual cause of death, in patients on different antiplatelet agents. We therefore sought to investigate the association between bleeding and mortality subtype, and assess whether this association differs in patients on dual antiplatelet therapy (DAPT) versus aspirin alone.

Methods: Using multivariable Cox proportional-hazards modeling, we examined the association between moderate or severe bleeding and all-cause, cardiovascular, and cancer mortality in 15,603 patients with cardiovascular disease or multiple risk factors enrolled in the Clopidogrel for High Atherothrombotic Risk and Ischemic Stabilization, Management, and Avoidance (CHARISMA) trial.

Results: Patients with moderate or severe bleeding had a higher incidence of all-cause, cardiovascular, and cancer mortality ($P < 0.001$ for each). After multivariable adjustment, moderate/severe bleeding remained independently associated with not only all-cause mortality (adjusted hazard ratio [HR], 1.66; 95% confidence interval [CI], 1.24-2.21) and cardiovascular mortality (HR, 2.05; 95% CI, 1.38-3.04), but cancer mortality as well (HR, 4.76; 95% CI, 2.60-8.69). However, there was a significant interaction between bleeding and potency of antiplatelet therapy for all-cause ($P = 0.002$), cardiovascular ($P = 0.02$), and cancer mortality ($P = 0.03$); in subjects on aspirin alone, moderate/severe bleeding was associated with all-cause (HR, 5.27; 95% CI, 3.56-7.80), cardiovascular (HR, 4.33; 95% CI, 2.55-7.37), and cancer mortality (HR, 9.01; 95% CI, 4.41-18.43), but not in subjects on DAPT (all-cause - [HR, 1.48; 95% CI, 0.93-2.34], cardiovascular- [HR, 1.04; 95% CI, 0.58-1.86] and cancer mortality [HR, 1.79; 95% CI, 0.56-5.74]).

Conclusions: In stable patients, moderate or severe bleeding is associated with a significantly increased risk of all-cause, cardiovascular, and cancer mortality. However, this risk differed in subjects on aspirin alone versus DAPT.